Claims

1. A method of determining the acoustical transfer impedance Z_t between a first position and a listening position of a human being, the method compris-

5   ing

- generating an acoustical volume velocity Q in the listening position,

- measuring a response quantity p at the first position resulting from the vol-

10   ume velocity Q, and

- determining the acoustical transfer impedance Z_t as the response quantity p divided by the acoustical volume velocity Q, $Z_t = p/Q$,

15   characterized in that

the acoustical volume velocity Q is generated using a simulator (10) simulating acoustic properties of at least a head of a human being, the simulator comprising a simulated human ear (14, 15) with an orifice in the simulated

20   head and a sound source (30) for outputting the acoustical volume velocity Q through the orifice.

2. A method according to claim 1, wherein the simulator simulates the head (13) and a torso (11) of a human being.

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3. A method according to claim 1, wherein the simulator comprises a sound source (30) in the interior of the simulator and a pair of microphones (M1, M2; M3, M4) arranged to measure a pair of sound pressures in a canal (18) leading from the sound source to the orifice, and that the method further

30   comprises determining the volume velocity Q based on the pair of sound pressures.

4. A method according to claim 1, wherein the response quantity is sound pressure.

5 5. A method according to claim 1, wherein the response quantity is vibration velocity or vibration acceleration.

6. A simulator (10) for use with the method according to any one of claims 1-5 and simulating acoustic properties of at least a head of a human being, the
10 simulator comprising a simulated human ear (14, 15) with an orifice in the simulated head and a sound source (30) for outputting the acoustical volume velocity Q through the orifice.

7. A simulator (10) according to claim 6, wherein the simulator simulates the
15 head (13) and a torso (11) of a human being.

8. A simulator (10) according to any claim 6, wherein the simulator comprises two orifices simulating a left ear (14) and right ear (15) respectively of the simulated human being.
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9. A simulator according to claim 8, wherein means (19) are provided for selectively outputting sound signals through the simulated left ear (14) or through the simulated right ear (15).

25 10. A simulator according to claim 6, wherein the simulator comprises means (M1, M2; M3, M4) for measuring the sound output from the simulated ears (14, 15).

11. A simulator according to claim 10, wherein the means for measuring the
30 sound output from the simulated ears (14, 15) comprises a pair of microphones (M1, M2; M3, M4) for measuring the output sound volume velocity.